

The Home Stretch

Stretching, one of the simplest fitness activities, is controversial. Will it prevent injuries? Some say yes, some say no. Is there a right and wrong way to do it? Different methods have their advocates. Here's a Q & A session about a type of exercise that has undeniable benefits—whichever side you take in the controversy—and also feels good.

Why should you stretch, and when should you do it?

Stretching improves flexibility, which allows you to move your joints through their full range of motion. Flexibility is a key element of fitness; it can enhance physical performance and relieve muscle tension and stiffness. You should stretch after a warm-up and/or when cooling down after a workout, since it is easier and safer to stretch a warm muscle than a cold one. Warm-ups bring blood to the muscles and make injuries from stretching less likely.

What is static stretching?

It's probably the safest kind. You stretch through a muscle's full range of movement until you feel resistance, but not pain, then hold the maximum position for 10 to 30 seconds, relax, and repeat several times. In static toe touches, for example, you slowly roll down, with knees bent, and hang in the down position without bouncing, then slowly roll up.

Will stretching prevent injury?

There is no hard evidence that it does. Runners who never stretch before running are no more prone to injury than those who stretch, according to some research. But, in theory, stretching should protect against injury, and many athletes believe it does. Whatever the answer, cold muscles are more likely to tear than warm ones. Warming up before stretching may prevent stretching injuries, and stretching itself may help prevent injuries while exercising. Stretching after exercising cannot head off muscle soreness if you've overdone things. However, it does promote flexibility and, as we've said, it feels good.

Warm up first, then stretch

Stretching should always be *preceded* by a brief (5- to 10-minute) warm-up, such as jogging in place, moderately energetic walking, riding a stationary bicycle, or doing less-vigorous rehearsals of the sport or exercise you're about to perform. Warming up gradually increases your heart rate and blood flow and raises the temperature of muscles, ligaments, and tendons. Stretching while muscles are cold may injure muscles. Sudden exertion without a warm-up can lead to abnormal heart rate and blood flow and changes in blood pressure, which can be dangerous, especially for older exercisers.

Tips for stretching

- Stretch at least three times a week to maintain flexibility.
- A session should last 10 to 20 minutes, with each static stretch held at least 10 seconds (working up to 20 to 30 seconds) and usually repeated about four times. Some trainers believe that stretches should be held for one to two minutes, but this is controversial.
- Stretch before exercising or playing a sport to improve performance and perhaps prevent injury.
- Besides a general stretch of major muscle groups, stretch the specific muscles required for your sport or activity.
- Do not stretch until it hurts. If there's any pain, stop.
- Don't bounce. Stretching should be gradual and relaxed.
- Focus on the muscle groups you want to stretch.
- Don't hold your breath during a stretch.

The basic stretching session:

1 NECK STRETCH Tilt head to right, keeping shoulders down. Place right hand on left side of head. Gently pull head toward right shoulder and hold for 10 to 30 seconds. Switch sides and repeat.



2 CALF STRETCH (for gastrocnemius and soleus muscles). Stand 2 to 3 feet from a wall, with feet perpendicular to wall in the position shown, and lean against wall for 10 to 30 seconds. Keep feet parallel to each other; make sure rear heel stays on floor. Switch legs and repeat. Variation: keep rear knee slightly bent during stretch.

3 SPINAL STRETCH Sit in a chair with your back straight, feet firmly on floor, toes pointing up slightly. Lock hands behind head, with elbows out and chin down. Contract abdominal muscles. To loosen up, twist upper body to one side as far as you can, then repeat 4 times in the same direction. The last time, rotate, hold, and then flex your torso forward, leaning toward floor with elbow. Hold for 2 seconds. Return to upright position. Repeat 8 to 10 times. Do same routine on other side.



4 OUTER THIGH STRETCH (for iliotibial band). Placing left hand against wall for balance, place left foot behind and beyond right foot. Bend left ankle and lean into wall. Hold for 10 to 30 seconds, then switch and repeat.

5 HIP STRETCH (for hip flexor). From a kneeling position, bring right foot forward until knee is directly over ankle; keep right foot straight. Rest left knee on floor behind you. Leaning into front knee, lower pelvis and front of left hip toward floor to create an easy stretch. Hold for 10 to 30 seconds, then switch legs and repeat.



6 BUTTERFLY STRETCH (for adductor muscles in groin). Sit on floor, bringing heels together near groin and holding feet together by the ankles. Have a partner gently push your knees down; hold for 5 seconds. Try to bring your knees upward as partner provides resistance. Relax, then have partner gently push down again for a greater stretch. Repeat. You can do the first part without a partner, simply by lowering your knees as far as possible.



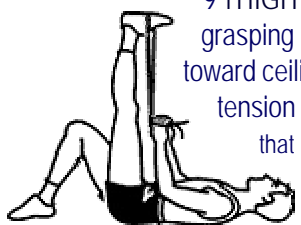
7 THIGH STRETCH (for quadriceps, in front of thigh). Lie on stomach. Have a partner grasp your lower leg and bend it until you feel the stretch on front of thigh. While partner provides resistance, try to push leg back for 3 to 5 seconds. Relax while partner bends your leg again until you feel a stretch again. Switch legs.



8 CROSSOVER STRETCH (for lower back). Lying on back, bend left knee at 90° and extend arms out to sides. Place right hand on left thigh and pull that bent knee over right leg. Keeping head on floor, turn to look toward outstretched left arm. Pull bent left knee toward floor; keep shoulders flat on floor. Hold for 10 to 30 seconds, then switch sides and repeat.



9 THIGH STRETCH (for hamstrings, in back of thigh). Lie on back. Place a rope loosely around sole of one foot, grasping both ends with both hands. Contracting front of thigh, lift that leg as high as possible, aiming your foot toward ceiling. "Climb" hand over hand up the looped rope to lift your leg gently, keeping upper body on floor. Keeping tension on the rope and using it for gentle assistance, hold stretch for 2 seconds. Don't pull your leg into position—that can cause knee problems. Repeat 8 to 10 times, then switch legs.



10 LUMBAR STRETCH (for lower back). Lying on back, clasp one hand under each knee. Gently pull both knees toward chest, keeping lower back on floor. Hold for 10 to 30 seconds, relax, then repeat.

